

REMARKS/ARGUMENTS

The foregoing amendments in the specification and claims are of formal nature, and do not add new matter.

Prior to the present amendment, Claims 58-77 were pending in this application and were rejected on various grounds. With this amendment, Claims 66-67 and 71-73 have been canceled without prejudice and Claims 58-65 and 68-69 have been amended to clarify what Applicants have always regarded as their invention.

Claims 58-65, 68-70 and 74-77 are pending after entry of the instant amendment. Applicants expressly reserve the right to pursue any canceled matter in subsequent continuation, divisional or continuation-in-part applications.

Priority

Applicants rely on the inhibition of endothelial cell growth assay (Example 109, Assay 9) for patentable utility which was first disclosed in International Application No. PCT/US99/05028, filed March 8, 1999, priority to which has been claimed in this application. Accordingly, the present application is entitled to at least the March 8, 2000 priority for subject matter defined in Claims 58-65, 68-70 and 74-77.

Utility

Applicants note that utility is established based on Example 109, Ability of PRO Polypeptides to Inhibit Vascular Endothelial Growth Factor (VEGF) Stimulated Proliferation of Endothelial Cell Growth (Assay 9).

Specification

As requested by the Examiner, the title of the application has been amended to recite a new, descriptive title indicative of the invention to which the claims are directed.

In addition, the specification has been amended to remove embedded hyperlink and/or other form of browser-executable code.

Claim Rejections – 35 U.S.C. §112, First Paragraph (Written Description)

Claims 58-77 are rejected under 35 U.S.C. §112, first paragraph, for allegedly "containing subject matter which was not described in the specification in such a way as to reasonably convey

to one skilled in the relevant art that the inventor(s), at the time of the application was filed, had possession of the claimed invention." In particular, the Examiner notes that "[t]he claims as written include polynucleotides encoding polypeptides having at least 80-99% sequence identity with SEQ ID NO:119 and polypeptides including or lacking various regions including, lacking its signal peptide, the extracellular domain, encoding the extracellular domain but lacking its signal peptide, as well as sequences which hybridize to these regions, but for which no particular biological activity or function is recited." Therefore, the Examiner asserts that "the instant disclosure of a single polypeptide, that of SEQ ID NO:119 with the instantly disclosed specific activities, does not adequately support the scope of the claimed genus."

Applicants submit that the cancellation of Claims 66-67 and 71-73 renders the rejection of these claims moot.

Without acquiescing to the Examiner's position, and solely in the interest of expediting prosecution in this case, Claims 58-62 (and, as a consequence, those claims dependent from the same) are amended to recite "the encoded polypeptide inhibits endothelial cell growth."

Accordingly, it is no longer true that the claims are drawn to a genus of polynucleotides defined by sequence identity alone. This biological activity, coupled with a well defined, and relatively high degree of sequence identity are believed to sufficiently define the claimed genus, such that one skilled in the art would readily recognize that the Applicants were in the possession of the invention claimed at the effective filing date of this application. The Examiner is therefore respectfully requested to reconsider and withdraw the present rejection.

Claim Rejections – 35 U.S.C. §112, First Paragraph (Enablement)

Claims 58-77 are rejected under 35 U.S.C. §112, first paragraph, allegedly "because the specification, while being enabling for SEQ ID NO:230 which encodes SEQ ID NO:119 exemplified as exhibiting activity [as shown in] Example 109..., does not reasonably provide enablement for the variable polynucleotide and peptide sequences and for such generic sequences where no requisite functional activity is provided as claimed." The Examiner further asserts that "[t]he specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims."

Applicants respectfully disagree and traverse the rejection.

Applicants submit that the cancellation of Claims 66-67 and 71-73 renders the rejection of these claims moot.

Without acquiescing to the Examiner's position, and solely in the interest of expediting prosecution in this case, Claims 58-62 (and, as a consequence, those claims dependent from the same) have been amended to recite "the encoded polypeptide inhibits endothelial cell growth." Since the claimed genus is now characterized by a combination of structural and functional features, any person of skill would know how to make and use the invention without undue experimentation based on the general knowledge in the art at the time the invention was made. As the M.P.E.P. states, "The fact that experimentation may be complex does not necessarily make it undue, if the art typically engages in such experimentation" *In re Certain Limited-charge cell Culture Microcarriers*, 221 USPQ 1165, 1174 (Int'l Trade Comm'n 1983), *aff. sub nom.*, *Massachusetts Institute of Technology v A.B. Fortia*, 774 F.2d 1104, 227 USPQ 428 (Fed. Cir. 1985) M.P.E.P. 2164.01. Accordingly, the Examiner is respectfully requested to reconsider and withdraw the present rejection.

Claim Rejections Under 35 U.S.C. §112, First Paragraph (Enablement)

Claims 58-77 are further rejected under 35 U.S.C. §112, first paragraph, allegedly for containing "subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention." The Examiner further asserts that "the specification lacks complete deposit information for the deposit of ATCC 209670."

Applicants submit that the cancellation of Claims 66-67 and 71-73 renders the rejection of these claims moot.

Applicants disagree with the Examiner's assertion that the deposit was necessary for enablement of the current invention. The current invention is fully enabled by the disclosure of the present application, including the sequence of PRO320 and its coding sequence. Further, as discussed above, the foregoing amendment to the specification corrects the address of ATCC, and further elaborates on the conditions of the deposit, which was made for patent purposes, under the terms of the Budapest treaty.

Nevertheless, Applicants enclose herewith a copy of the deposit receipt indicating that DNA32284-1307 deposit, ATCC Deposit No. 209670, was made by Applicants on March 11, 1998.

In addition, as stated above, Applicants respectfully submit that the specification clearly discloses that the deposit was made under the Budapest Treaty and provides the accession number for the deposit, the date of the deposit, the description of the deposited material, and the name and address of the depository starting on page 372, line 34 of the specification.

Applicants further submit that the specification has been amended to recite that the deposit will be maintained "for 30 years from the date of deposit and for at least five (5) years after the most recent request for the furnishing of a sample of the deposit received by the depository" and to recite that "all restrictions imposed by the depositor on the availability to the public of the deposited material will be irrevocably removed upon the granting of the pertinent U.S. patent."

Accordingly, Applicants believe that the present rejection should be withdrawn.

Claim Rejections – 35 U.S.C. §112, Second Paragraph

Claims 58-77 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants submit that the cancellation of Claims 66-67 and 71-73 renders the rejection of these claims moot.

Without acquiescing to the Examiner's position, and solely in the interest of expediting prosecution in this case, as amended, the terms "extracellular domain" and "extracellular domain ... lacking its associated signal peptide" are no longer present in Claims 58-63 (and, as a consequence, those claims dependent from the same). Hence, the rejection is believed to be moot, and should be withdrawn.

Claim Rejections – 35 U.S.C. §102

Claims 58-77 are rejected under 35 U.S.C. §102(e) as being anticipated by Ford *et al.*, U.S. Patent No. 6,392,018, filed February 12, 1999 and issued May 21, 2002.

Applicants thank the Examiner for confirming the priority date of the cited reference as February 12, 1999 during telephone conference with Anna Barry on November 1, 2004.

Applicants respectfully submit the attached Declaration signed by all of the inventors, Dr. Ferrara, Dr. Goddard, Dr. Godowski, Dr. Gurney and Dr. Wood, the consideration of which is respectfully requested.

As stated in the Declaration and evidenced by Exhibit A, Applicants had obtained PRO320 polypeptide and had examined the effect of this polypeptide on the endothelial cell proliferation in the United States prior to February 12, 1999. The test results indicated that PRO320 inhibit the proliferation of endothelial cells induced by VEGF and has utility in cancer therapy and specifically in inhibiting tumor angiogenesis. Accordingly, the Declaration clearly shows that the invention claimed in the present application was conceived and reduced to practice prior to February 12, 1999. Accordingly, the Examiner is respectfully requested to reconsider and withdraw the present rejection.

CONCLUSION

All claims pending in the present application are believed to be in *prima facie* condition for allowance, and an early action to that effect is respectfully solicited.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 08-1641 (referencing Attorney's Docket No. 39780-2630 P1C62). Please direct any calls in connection with this application to the undersigned at the number provided below.

Respectfully submitted,

Date: November 29, 2004

By: 
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